7. Evaluation and Assessment of Impact

THE PROJECT area at Wilson's Run possesses considerable historical interest because of its association with the industrial and labor history of the Brandywine Valley. While only part of the project area is on the National Register, the entire project area is proposed for registration under an expanded nominaton (Bower 1990).

Archæological testing in the project right-of-way affirmed earlier conclusions by Blume (1990:20) that no prehistoric remains are likely to have survived in this locality. Most significant of the cultural remains is the complex of superimposed races that powered the saw and grist mills a short distance down Wilson's Run.

Stone walls in the project area (PLATE 12), like others in the neighborhood, are monuments to an industrial period when working conditions could be at once benign and hazardous. Folklore surrounding duPont farm stonework may not be precisely historically accurate, but it highlights deeper currents in local culture history. These currents of ethnic tension, labor conditions, and immigration need to be studied in a larger context, but are outside the scope of this paper.

The entire complex of walls is probably significant under criterion D, properties that have contributed, or can be expected to contribute, to our knowledge of the history of the stonemason's craft. The short segments in the project area, as artifacts, contribute to the integrity of the whole group of walls.

The race (FIGURE 9) is a contributing, indeed, essential, part of the mill complex (PLATE 13), which in turn is integral to the history and significance of the Winterthur property. The mill site is incomplete without the race and the dam; any impact on the the race has a direct effect on other elements of the mill seat.

A counterfeit milestone (PLATE 16) in the project area is significant as an example of the fakery that was accepted during the early days of the preservation movement. Although it possesses no significance in the history of transportation, it typifies an era when the milestone was almost an obligatory feature of any "old time" road scenery. It is not eligible by itself to be listed in the National Register of Historic Places.

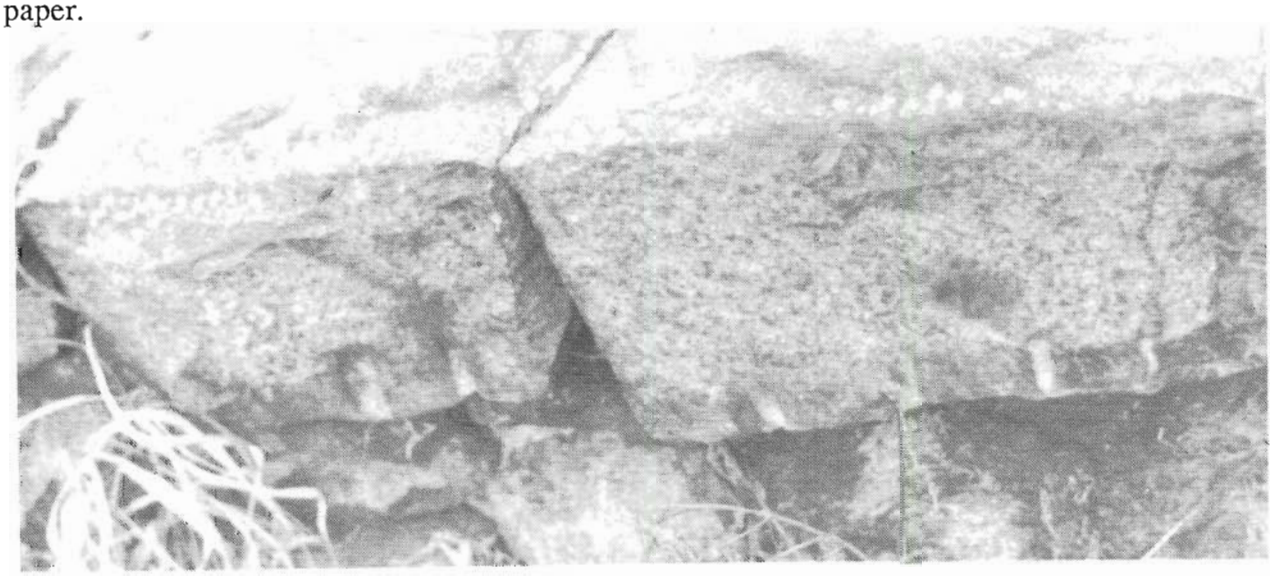

Plate 12

Detail of dressed rectangular capstones on a rubble-style wall along Thompson's Bridge Road

ETHNIC HISTORY

Brandywine Valley's rich heritage of stonework bears witness to the immigration of skilled workers to industrial America during the nineteenth century. Wilmington's Italian-American community owes a significant historical debt to the factories and railroads of the Brandywine, where skilled stoneworkers found ready employment. Even today, in the popular mind, stonework in and around the duPont powder mill complex is identified as Italian in origin, as distinguished from the plant work force, which is perceived to have been largely Irish.

Labor and hiring arrangements among immigrant stoneworkers bears further investigation by a labor historian. The presence of contract labor bosses in such an integral part of the industrial scene has not previously been discussed by historians.

Such apparent exploitation of one nationality in contrast to paternalistic treatment of another group is also a subject that deserves exploration.

Different levels of fortunes of these two communities could possibly be traced to prejudice or some other attitude held by the exploiting class, but worker exploitation is a subject more easily handled by labor historians than by archæologists.

MILLS

Water powered saw and grist mills were ubiquitous in Delaware from earliest settlements until the end of the nineteenth century.

In 1804, Christiana Hundred reportedly had two sawmills, five gristmill and sawmill combinations, and nine gristmills. In 1822, another survey found only seven gristmills and two combination mills in the hundred (Scharf 1888:885-886).

Other power sources were embraced by the flour and lumber industries for very practical reasons related to location, reliability, and expense. During the latter years of the nineteenth century, water power was perceived to be a dying branch of industry.

In fact, the use of water power was actually increasing during the late nineteenth and early twentieth centuries, but its market share was slipping as coal and oil power became more efficient. New applications of water power were different from the old ones, and were almost exclusively hydroelectric.

Plate 13

Colonel duPont's sawmill
old photo courtesy DNREC

Plate 14

Overall view of the machine-cut trench. unit 6, through the sawmill race, with tape measure strung level for recordation. The road in background is the road to Rockland, at left. Note the draintile structure, shown in the detail below.

Plate 15 (below)

Detail of draintile structure, as found, with the board and stones. Note extreme wetness.in the trench. The tiles lay in a double row, on a prepared board. The tiles were protected by a roof and walls of stone.

A few profitable water-powered saw and grist mills have survived to the present, but not because water power is superior to other power sources. Water-powered grist mills, which outnumber water-powered saw mills by a large degree, have survived either because of a remarkably reliable water source, or because no costly repairs have been required. Grist mills in more recent times have often been too marginal to survive the expense of equipment failure or a dam break.

The mill on Wilson's Run is an exception to the historical pattern. In an era when water-powered saw mills were becoming all but extinct in Delaware, Colonel duPont built a modern mill with concrete control structures and up-to-date machinery, powering it from a totally rebuilt mill race.

Instead of reflecting trends in the history of saw mill operations, the Wilson's Run mill may reflect a wealthy industrialist's commitment to the future of water power, notwithstanding powerful indications to the contrary. This is the same person who built a hydroelectric plant in the powder yard and strung wires to his own house.

Such commitment to water power makes sense, considering the fact that the owner had spent his career in the water-powered duPont black-powder mills, where safety and economics continued to favor water power.

But black powder and water power were disappearing from the explosives industry. Smokeless powder, manufactured in new factories, was supplanting the traditional product of Hagley, which closed in 1921 (Munroe 1979: 238) and reopened three decades later as a museum.

Colonel Henry duPont died five years after the Hagley yard closed. The great hay farms, and his own Winterthur estate, became residential sites for a new generation whose attachment to the manufacturing process and to agriculture was not intimate. Company employees no longer worked on farms, which ceased to have a role in the industrial process.

With its concrete dam and concrete control structures, the mill race has no integrity if it is viewed as a remnant of the period when water power ruled American industry. Instead, what survives today provides a glimpse into the private life of a very public person, Colonel Henry Algernon duPont, industrialist, Medal of Honor recipient, United States Senator, and the last head of the old Company.

GENTEEL HISTORICAL FICTIONS

Historical fakery was a distinguishing characteristic of early twentieth-century historic preservation. In the days before scientific restoration and professional research for preservation, genteel fiction mixed liberally into the facts where a good story might be appropriate.

A popular folly was the milestone. "Historic" old milestones proliferated, imbedded in the popular imagination by New England writers and historical artists who sprinkled them across a fictional historic landscape (PLATE 16, NEXT PAGE).

While there are a few original historic milestones along former turnpikes in Delaware, the one along Route 100 in the project area is not among them. It is clearly a modern forgery, larger and more clearly cut than any of the surviving originals.

Some milestones were moved to new, more picturesque, sites, while others were improved. The one at the corner of Naamans Road and Route 13, for example, was moved circa 1915 to a more prominent position and endowed with the Penn arms, even though it actually was placed along the turnpike long after the end of the Penn proprietary.

ELIGIBILITY AND EFFECT

The mill race and the stone walls in the project area are parts of larger industrial resources that almost certainly are eligible for the National Register under criterion D. If a "chateau country" theme is ever developed, the milestone might be included.

The tested section of race has yielded considerable information about mill power system construction, and the system probably could be expected to yield more information. The section inside the project area probably has yielded as much as can be expected.

The road will cross part of the mill race that has lost considerable integrity. The

best-preserved parts of the system lie on park property, where they are protected. Construction of the road can be expected to do little, if any, damage to the power system.

Although they may possess æsthetic attraction, the walls are most significant as examples of the varied workmanship of different workers under different conditions at different times. Each wall is an archæological resource, containing in its structure a body of information regarding builders' training, origins, and working conditions. They are the most durable and visible evidence for the earliest phase of Italian immigration into Delaware.

Plate 16

Modern imitation of a historic milestone, located near Adams Dam in the project area along Route 100 (N-12669)

RECOMMENDATIONS

Hydraulic data about the mill is potentially the most significant resource to be lost when a race is cut. Demolition of the existing Adams Dam and Thompson's Bridge roads could obliterate part of the mill's hydraulic power system. The survey reported here will preserve much of the evidence, especially concerning the vertical relationship between the dam and the mill elevations.

Where the road crosses the old race system, gates or bridges may have been preserved by the perpetual subgrade wetness. This area should be watched during construction.

One wall segment is scheduled to be removed from the new route of Thompson's Bridge Road. Another segment, between Bridge 70 and the intersection, has already suffered considerable damage and will no longer be in its original context adjacent to the road. Avoidance would be, as always, the preferred treatment. If the wall cannot be avoided, the alternatives are to move, reproduce, or demolish it.

If a wall must be moved, it should be moved in one piece, to preserve the original workmanship, consistent with the Secretary of the Interior's standards. While a rebuilt or reproduced wall might replicate the mere superficial appearance of the original artifact, modern workers can hardly be expected to understand, much less duplicate, nuances of nineteenth-century stoneworking. Since the walls possess significance primarily as a document of workmanship, any rebuilding would destroy the integrity of the walls and render them worthless in terms of National Register criterion D.

Thus, if the wall cannot be avoided, the most prudent treatment consistent with the guidelines might be to allow its destruction after documentation. Reconstruction would be inappropriate, and would contribute nothing to the historical environment.

A superficially similar rebuilt wall could hardly be justified in terms of historic preservation, any more than a faked milestone is an authentic "colonial" road marker.